ABSTRACT:

Described here is a method of determining an eigenspace for representing a plurality of training speakers, in which first speaker-dependent sets of models are formed for the individual training speakers while training speech data of the individual training speakers are used and the models (SD) of a set of models are described each by a plurality of model

5   parameters. For each speaker a combined model is then displayed in a high-dimensional model space by concatenation of the model parameters of the models of the individual training speakers to a respective coherent supervector. Subsequently, a transformation is carried out, while the dimension of the model space is reduced for recovering eigenspace basis vectors ($\underline{E}_e$). To guarantee an unambiguous assignment of the model parameters in the

10   supervectors, first a common speaker-independent set of models is developed for the training speakers and this set of models is adapted to the individual training speakers to develop the speaker-dependent sets of models. The assignment of the model parameters of the models (SI) of the speaker-independent set of models to the model parameters of the models (SD) of the speaker-dependent sets of models is then realized and the concatenation of the model

15   parameters of the individual sets of models to the supervectors is made while this assignment is taken into consideration.

Fig. 1